

Please type a plus sign (+) inside this box →

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

IDS FORM		Application Number	10/790,959
		Filing Date	March 1, 2004
		First Named Inventor	Takemori TAKAYAMA
		Group Art Unit	1742
		Examiner Name	Deborah YEE
Sheet	1	Attorney Docket Number	03773/HG



U.S. PATENT DOCUMENTS

Exam. Inits*	Cite No ¹	Document Number	Kind Code ²	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion
		6,899,774	B2	KOMATSU LTD	05-31-2005	
		RE 28,523		REPUBLIC STEEL CORPORATION	08-19-1975	
		5,131,965	A	CATERPILLAR INC	07-21-1992	
		4,162,157		USA/DEPT OF ENERGY	07-24-1979	

FOREIGN PATENT DOCUMENTS

Exam. Inits*	Cite No ¹	Offc ³	Document Number ⁴	Kind Code ⁵	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion	T ⁶
		JP	49-7117	A	MITSUBISHI STEEL MFG CO LTD	01-22-1974		a
		JP	54-10923	B2	NIPPON STEEL CORP	05-10-1979		a
		JP	54-23329	B2	KOMATSU LTD	08-13-1979		a
		JP	55-12184	B2	TOYOTA MOTOR CORP et al	03-31-1980		a
		JP	57-10177	B2	TOPY INDUSTRIES LTD	02-25-1982		a
		JP	57-16186	B2	KAWASAKI HEAVY IND LTD	03-08-1977	b	
		JP	57-19183	B2	NIPPON STEEL CORP	03-23-1978	b	
		JP	55-2789	A	KOMATSU LTD	01-10-1980	b	

Examiner Signature	Date Considered	
--------------------	-----------------	--

* EXAMINER: Initial if document considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Place a check here if English translation is attached.

DATE: October 16, 2007

a ENGLISH-LANGUAGE TRANSLATION OF TITLE PAGE ONLY ENCLOSED; b ENGLISH-LANGUAGE ABSTRACT ENCLOSED

Please type a plus sign (+) inside this box →

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

IDS FORM INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/790,959
				Filing Date	March 1, 2004
				First Named Inventor	Takemori TAKAYAMA
				Group Art Unit	1742
				Examiner Name	Deborah YEE
Sheet	2	of	4	Attorney Docket Number	03773/HG

U.S. PATENT DOCUMENTS

Exam. Inits*	Cite No ¹	Document Number	Kind Code ²	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion

FOREIGN PATENT DOCUMENTS

Exam Inits*	Cite No ¹	Offc ³	Document Number ⁴	Kind Code ⁵	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion	T ⁶
		JP	57-89424	A	SUMITOMO METAL IND LTD	06-03-1982		a
		JP	57-174434	A	KOMATSU LTD	10-27-1982		a
		JP	59-107066	A	MITSUBISHI HEAVY IND LTD	06-21-1984		a
		JP	59-136451	A	MITSUBISHI HEAVY IND LTD	08-06-1984		a
		JP	5-32462	B2	NIPPON STEEL CORP	07-07-1989		a
		JP	7-74380	B2	NIPPON STEEL CORP	10-02-1991		a
		JP	5-59427	B2	MITA IND CO LTD	03-30-1984		a
		JP	3227730	B2	DAIDO STEEL CO LTD	03-02-1993		a
		JP	55-12177	B2	KOMATSU LTD	01-10-1977		a
		JP	54-124816	A	MITSUBISHI HEAVY IND LTD	09-28-1979		a
		JP	54-143715	A	MITSUBISHI HEAVY IND LTD	11-09-1979		a

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

* EXAMINER: Initial if document considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Place a check here if English translation is attached.

DATE: October 16, 2007

a ENGLISH-LANGUAGE ABSTRACT ENCLOSED

Please type a plus sign (+) inside this box →

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

IDS FORM INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/790,959
				Filing Date	March 1, 2004
				First Named Inventor	Takemori TAKAYAMA
				Group Art Unit	1742
				Examiner Name	Deborah YEE
Sheet	3	of	4	Attorney Docket Number	03773/HG

U.S. PATENT DOCUMENTS

Exam. Inits*	Cite No ¹	Document Number		Kind Code ²	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion
		2004/0047757		A1	TAKAYAMA	03-11-2004	

FOREIGN PATENT DOCUMENTS

Exam. Inits'	Cite No ¹	Offc ³	Document Number ⁴	Kind Code ⁵	Name of Patentee or Applicant	Publication Date MM-DD-YYYY	Relevant Portion	T ⁶
		JP	2002-121645		NKK BARS & SHAPES CO LTD	04-26-2002	a	
		JP	60-215743		SUMITOMO METAL INDUSTRIES CO LTD	10-29-1985	a	
		JP	05-078781		SUMITOMO METAL IND LTD et al	03-30-1993	a	
		JP	9-111403		TOA STEEL CO LTD	04-28-1997	a	
		JP	8-109435		TOA STEEL CO LTD	04-30-1996	a	
		JP	48-23617	A	KOMATSU LTD	03-27-1973		

Examiner Signature

Date Considered

* EXAMINER: Initial if document considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Place a check here if English translation is attached.

DATE: October 16, 2007

a ENGLISH-LANGUAGE TRANSLATION ENCLOSED

Please type a plus sign (+) inside this box →

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

IDS FORM				Application Number	10/790,959
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	March 1, 2004
				First Named Inventor	Takemori TAKAYAMA
				Group Art Unit	1742
				Examiner Name	Deborah YEE
Sheet	4	of	4	Attorney Docket Number	03773/HG

OTHER DOCUMENTS - NON-PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of author (in CAPITAL LETTERS), title of article, title of item, date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		J.R. DAVIS, "ASM METALS HANDBOOK", Second Edition, (1998)	
Examiner Signature			
		Date Considered	

* EXAMINER: Initial if document considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Place a check here if English translation is attached.

DATE: October 16, 2007